



VIDEO PIPE SERVICES, INC.

Specializing in today's needs for environmental protection.

1566 Harding Highway ■ Newfield, NJ 08344-5220 ■ Tel (856) 697-1900 ■ Fax (856) 697-0757
11420 Old Baltimore Pike ■ Beltsville, MD 20705 ■ Tel (301) 931-0707 ■ Fax (301) 931-0990

Dear Customer:

As part of our deliverable's package, we have included a defect summary sheet of this project. These defects (in PACP format) were observed by our CCTV operator during the inspection of the pipe sections. The report is color coded to be consistent with PACP standards.

- 1: Excellent Condition
Minor defects, failure is unlikely in the foreseeable future.
- 2: Good
Defects that have not begun to deteriorate, pipe is unlikely to fail for at least 20 years.
- 3: Fair
Moderate defects that will continue to deteriorate, pipe may fail in 10-20 years.
- 4: Poor
Severe defects that will become Grade 5 within the foreseeable future, pipe will probably fail in 5-10 years.
- 5: Immediate Attention
Defects requiring immediate attention, pipe has failed or will likely fail within the next 5 years.

For purposes of this report, we recorded "level 2" cracks and all other defects at level 3 and above.

The report is broken down by pipe segment (manhole-to-manhole) in descending order of QSR (Quick Structural Rating) number. This number is the overall rating of the pipe based on the number of defects in the pipe segment and their severity. The highest numbered pipe is the most structurally deficient pipe in the report. QSR numbers of 5000 and above should require your immediate attention.

WinCan V8 Defect Report sorted by QSR

MOBILE 5-1-2013.mdb

WinCan Section Number	From Manhole	To Manhole	Quick Structural Rating	Position in Feet	Defects															
					A L I G N	B R O K E N	C O L L A P S E	C R A C K	D E F O R M E D	D E P O S I T S	F R A C T U R E	H O L E	I N F I L T	I N T R U D E	L I N I N G	O B S T A C L E	R O O T S	S U R F A C E	T A P	W A T E R L E V
1	COVERT OPENING	END	5300	56.9									ID							
				65.0								HWV								
				65.0		B														
				66.5						DNGV										
				73.7			XP													

WinCan Defect Report Legend

Color Codes

	Level 1
	Level 2
	Level 3
	Level 4
	Level 5

Defect Codes

Category	Code	Definition	Category	Code	Definition
ALIGNMENT	LD	Alignment Down	ROOTS	RBB	Ball - Barrel
	LR	Alignment Right		RBC	Ball - Connection
BROKEN	B	Generic Code		RBJ	Ball - Joint
	BSV	Soil Visible Beyond Defect		RBL	Ball - Lateral
	BVV	Void Visible Beyond Defect		RFB	Fine - Barrel
COLLAPSE	XB	Brick Collapse		RFC	Fine - Connection
	XP	Pipe Collapse		RFJ	Fine - Joint
CRACK	CC	Circumferential		RFL	Fine - Lateral
	CL	Logitudinal		RMB	Medium - Barrel
	CM	Multiple		RMC	Medium - Connection
	CS	Spiral		RMJ	Medium - Joint
DEFORMED	D	Generic Code		RML	Medium - Lateral
	DH	Deformed Horizontally (brick)		RTB	Tap - Barrel
	DV	Deformed Vertically (brick)		RTC	Tap - Connection
DEPOSITS	DAE	Attached - Encrustation		RTJ	Tap - Joint
	DAGS	Attached - Grease		RTL	Tap - Lateral
	DAR	Attached - Ragging			
	DAZ	Attached - Other			
	DNF	Ingress - Fine Material			
	DNGV	Ingress - Gravel			
	DNZ	Ingress - Other			
	DSC	Settled - Hard			
	DSF	Settled - Fine			
	DSGV	Settled - Gravel			
	DSZ	Settled - Other			
FRACTURE	FC	Circumferential			
			SURFACE DAMAGE	SAM	Aggregate Missing
				SAMC	Aggregate Missing - Chemical Attack
				SAMM	Aggregate Missing - Mechanical
				SAMZ	Aggregate Missing - Not Evident
				SAP	Aggregate Projecting
				SAPC	Aggregate Projecting - Chemical Attack
				SAPM	Aggregate Projecting - Mechanical
				SAPZ	Aggregate Projecting - Not Evident
				SAV	Aggregate Visible
				SAVC	Aggregate Visible - Chemical Attack

WinCan Defect Report Legend

	FL	Logitudinal
	FM	Multiple
	FS	Spiral
HOLE	H	Generic Code
	HSV	Soil Visible Beyond Defect
	HVV	Void Visible Beyond Defect
INFILTRATION	ID	Dripper
	IG	Gusher
	IR	Runner
	IS	Stain
	IW	Weeper
INTRUDING	ISSRH	Intruding Sealing Ring - Broken
	ISZ	Intruding Sealing - Other
LINING FAILURE	LFAC	Abandoned Connection
	LFB	Blistered Lining
	LFBK	Buckled Lining
	LFCS	Service Cut Shifted
	LFD	Detached Lining
	LFDE	Defective End
	LFDL	Delaminating
	LFOC	Overcut Service
	LFPH	Pinhole
	LFUC	Undercut Service
	LFW	Wrinkled Lining
	LFZ	Other
OBSTACLES	OB	Brick or Masonry
	OBC	Object Thru Connection/Junction
	OBI	Object Protruding thru Wall
	OBJ	Object Wedged in Joint
	OBM	Pipe Material in Invert
	OBN	Construction Debris
	OBP	External Pipe Cable
	OBR	Rocks
	OBS	Built into Structure
	OBZ	Other

	SAVM	Aggregate Visible - Mechanical
	SAVZ	Aggregate Visible - Not Evident
	SCP	Corrosion (metal pipe)
	SMW	Missing Wall
	SMWC	Missing Wall - Chemical Attack
	SMWM	Missing Wall - Mechanical
	SMWZ	Missing Wall - Not Evident
	SRC	Reinforcement Corroded
	SRCC	Reinforcement Corroded - Chemical Attack
	SRCM	Reinforcement Corroded - Mechanical
	SRCZ	Reinforcement Corroded - Not Evident
	SRI	Roughness Increased
	SRIC	Roughness Increased - Chemical Attack
	SRIM	Roughness Increased - Mechanical
	SRIZ	Roughness Increased - Not Evident
	SRP	Reinforcement Projecting
	SRPC	Reinforcement Projecting - Chemical Attack
	SRPM	Reinforcement Projecting - Mechanical
	SRPZ	Reinforcement Projecting - Not Evident
	SRV	Reinforcement Visible
	SRVC	Reinforcement Visible - Chemical Attack
	SRVM	Reinforcement Visible - Mechanical
	SRVZ	Reinforcement Visible - Not Evident
	SSS	Surface Spalling
	SSSC	Surface Spalling - Chemical Attack
	SSSM	Surface Spalling - Mechanical
	SSSZ	Surface Spalling - Not Evident
	SZ	Other
	SZC	Other - Chemical Attack
	SZM	Other - Mechanical
	SZZ	Other - Not Evident
TAP	TBC	Break In - Capped
	TBD	Break In/Hammer - Defective
	TBI	Break In - Intruding
	TFD	Factory Made - Defective
	TSD	Saddle - Defective



***VIDEO PIPE SERVICES, INC.
1566 Harding Highway
Newfield, NJ 08344***

A Carylon Company

MOBILE DREDGING & PUMPING

***Chester, PA
Chemical Plant***

***CCTV
Report***

*Prepared
May 6, 2013*

[illegible]



The Environmental
Protection Specialists

Video Pipe Services, Inc.
1566 Harding Highway
Newfield, NJ 08344
Tel: (856) 697-1900
Fax: (856) 697-0757
E-mail:

Inspection Report / Inspection: TV

Date 5/1/2013	P/O. No. MIOBILE	Weather Dry	Surveyor's Name Fred Tipton	Pipe Segment Reference	Section No. 1
Certificate No. U-506-3374	Survey Customer MOBILE DREDGING & P	System Owner CHESTER, PA	Date Cleaned 5/1/2013	Pre-Cleaning Heavy Cleaning	Sewer Category

Street123 City Loc. details Location Code	COVERT SLUICEWAY Easement/Right of Way	Use of Sewer Drainage Area Flow Control Length surveyed	Stormwater 74.00 ft	Upstream MH Downstream MH Dir. of Survey Section Length	COVERT OPENING END Downstream 74.00 ft
Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	Routine Assessment MOBILE-1	Joint Length Dia./Height Material Lining Method		60 inch Concrete Pipe (non-reinforced)	
Add. Information :	UNDER RAIL RD CROSSING				

1:600

Position

Code

Observation

Photo

Grade

COVERT OPENING

0.00

2.20

56.90

65.00

65.00

66.50

73.70

73.70

74.00

AOC

S1

ID

HVV

B

DNGV

F1

XP

MSA

Special Chamber / START

Surface Aggregate Projecting, from 12 to 12 o'clock, within 8 inches of joint: YES, Start

Infiltration Dropper, at 12 o'clock, within 8 inches of joint: NO

Hole Void Visible, at 12 o'clock, within 8 inches of joint: NO

Broken, at 12 o'clock, within 8 inches of joint: NO

Deposits Ingress Gravel, 60 %of cross sectional area, from 03 to 09 o'clock, , within 8 inches of joint: NO / SOLID

Surface Aggregate Projecting, from 12 to 12 o'clock, within 8 inches of joint: YES, Finish

Collapse Pipe Sewer, 80 %

Survey Abandoned / AT COLLAPSE

1_4A

1_5A

1_6A

1_8A

M 3

S 5

S 5

M 5

S 5

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5300	5131	15	8	23	5	4	4.6



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Inspection photos / Inspection: TV

City : SLUICEWAY	Street : COVERT	Date :	Pipe Segment Reference :	Section No : 1
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Photo: 1_65_01052013_085948__A.JPG, VCR No.: MOBILE-1
65FT, Hole Void Visible, at 12 o'clock, within 8 inches of joint: NO

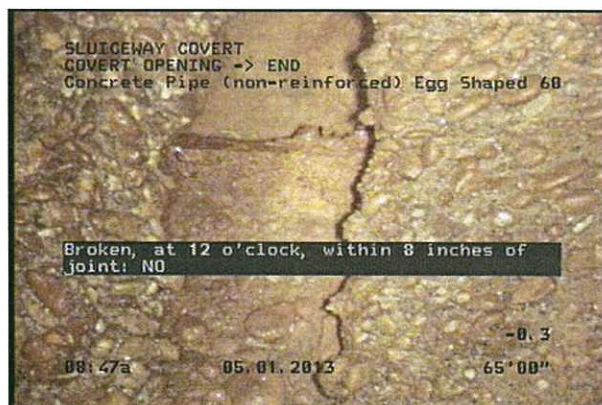


Photo: 1_65_01052013_090105__A.JPG, VCR No.: MOBILE-1
65FT, Broken, at 12 o'clock, within 8 inches of joint: NO

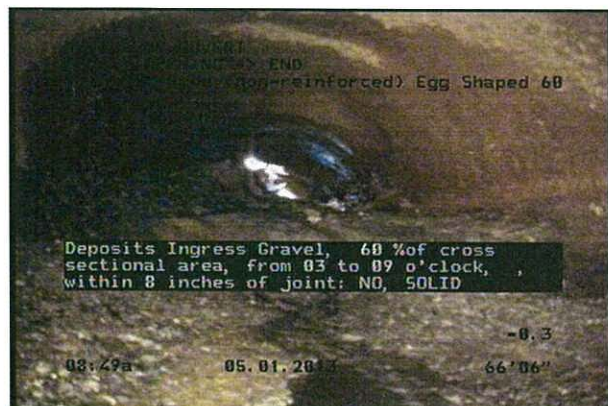


Photo: 1_66.5_01052013_090329__A.JPG, VCR No.: MOBILE-1
66.5FT, Deposits Ingress Gravel, 60 %of cross sectional area, from 03 to 09 o'clock, within 8 inches of joint: NO



Photo: 1_73.7_01052013_090603__A.JPG, VCR No.: MOBILE-1
73.7FT, Collapse Pipe Sewer, 80 %